City of Cambridge.

REPORT

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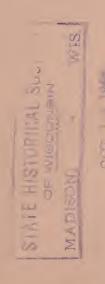
THE SCHOOL COMMITTEE

AND THE REPORT OF THE

SUPERINTENDENT OF SCHOOLS,

FOR THE YEAR 1870.







CAMBRIDGE:

PRESS OF JOHN WILSON AND SON. 1871.



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REPORT

OF

THE SCHOOL COMMITTEE FOR 1870.

THE Report of the Committee of 1869 opens with a reference to the numerous changes in the membership of the Board which had occurred during that year, and to their unfavorable effect.

We are happy to state that for the current year thirteen of the fifteen original members unite in the Annual Report, and that the schools have not suffered during the past year by unnecessary resignations in this Board.

The last Report called attention to the "limited financial power of the Committee, and its consequences."

The opinions expressed at that time seem to have received considerable attention during the year now ending; and although we are still working under the same system and suffering more or less from the legal and constitutional embarrassments of which complaint was made, there has been an amount of well-meant co-operation between the Board and the other departments of the City Government, which has gone far to relieve the evils from which the Committee last year reported the schools to be suffering.

In the matter of school accommodation, for example, important efforts have been made in the year past to meet the deficiency. The Committee would refer for fuller statements under this head to the Report of the Superintendent of Schools, which is printed herewith. We may, however, say in general that two new Primary buildings have been erected and are now nearly completed. Considerable additions and repairs have been made. Ground has been purchased for the erection of a building to accommodate the

Harvard Grammar School. The plans have been completed and the contracts signed, and the work is to commence on them early in the spring.

The Committee are, however, obliged to report that there yet remain embarrassments and delays which their "limited financial powers" prevent them from reaching, and which frequently cause a large amount of disturbance in the schools.

Sudden calls are made for apparently small but exceedingly necessary repairs here and there. It may be nothing larger than a bolt broken in a door, panes of glass out of the windows, or something wrong in the furnace or the flues. But the want, however small it may be, is often large enough to result either in loss of time in the instruction of the classes, or in their continued exposure or discomfort. Not unfrequently whole schools have to be dismissed, and several hundred children sent home, for no other reason than a break somewhere in the circuitous ways by which the Committee are compelled to reach the case.

The arrangements for warming and ventilating many of the rooms and buildings continue to provoke loud complaint. The Committee have no power but that of raising a protest. Their hands are tied by statute.

These remarks are not made in a spirit of complaint against the City Council, with whose various committees they have been in most cordial co-operation. The difficulty is not one of persons, but of system. The School Board is wisely constituted by statute a permanent body. One third only of its members retire each year. The City Council is chosen anew each year; and, however excellent the intentions of the incoming City Government may be, there is no system of co-operation to guide them. They require time to examine the ground, to form their opinions of what is required, and meantime the important interests of the schools have to depend upon the good sense and public spirit of individual officers.

It may be that the public good requires the present statute, which commits the administration of the public property to the City Council, to remain unchanged. It may be true that the men who are best fitted to conduct the public education are not the best to manage the pecuniary affairs of the school system, and that the

introduction of any considerable financial responsibility into the jurisdiction of the School Committee would tend to make a seat in it a political prize, and so introduce those political considerations into the choice of its members from which we believe it should at all times be carefully guarded.

But such reflections as these do not imply that the Board are to have no voice nor power in the regulation of such matters as those to which we refer. It will hardly be pretended that the statute contemplates the erection of school-houses without the concurrence and co-operation of the Committee, or that it creates a state of things in which the Committee are not sure of being able to open their schools every day in the term, or to carry forward the public instruction in them without embarrassment.

The public good requires a system of co-operation. As long as the connection between the Board and the custodians of the school property is only made, as now, through a Committee who proceed according to their own ideas and at their own pace, there will be complaint. There should be some permanent rules to regulate the matter. Some things, of slight importance financially, might be conceded by mutual agreement to the charge of the School Committee; and a systematic plan of co-operation be arranged to fix the responsibility of regulating at least such matters as require immediate attention on some official who can be reached without loss of time and without great trouble.

THE HIGH SCHOOL.

The current year has been one of progress and of marked success in this institution. The staff of officers has not been increased in number, but has been changed by the appointment of Mr. L. R. Williston Head Master, and of Miss Gleason to succeed Miss Child, who in the autumn resigned. The Committee will not say that the school will never in the future attain a higher efficiency than it has at present. They hope that it will. But they are confident that it has never been more worthy of patronage than now. It is a rare felicity that we were able to recall to its administration a master who had once before given it such excellence.

The course of study has been raised to the standard to be required hereafter for admission to Harvard College, and in consequence lengthened to five years. Work on this scale has begun, but it is evident that some time must elapse before the new system will be fully inaugurated. In the shorter, or English course some changes may be required to adapt it more thoroughly to the work to be done. The additional year which is now thrown into the High School course is not designed to constitute a year's delay in entering college. But to prevent it from having this result some measures will have to be adopted to give Grammar scholars an opportunity to come forward more rapidly.

It is hoped that this subject will receive the attention of the Committee during the coming year. Possibly the Boston plan, by which active scholars can advance their standing and complete the Grammar School work earlier than their less diligent or less capable companions, would be the best.

Under the present system it is hardly possible for scholars under fourteen years of age to enter the High School. To those who are fitting for college many of the Grammar School studies are unnecessary, as the same knowledge would be gained afterwards in their subsequent studies and in a better way. Might not capable boys of the age of twelve years, wishing to take the college course, be allowed to apply for admission to the High School upon passing a satisfactory examination, and in case of success be excused from the last year in the Grammar School?

The amount of work done by the teachers in the High School is already as great as can be performed by the number now employed. Should the school increase, as it is likely to do, another teacher will be required. The instructors are now too much occupied to find time or strength for the proper use or care of the Library, and the result has been that it has not been made as useful as so valuable a collection should be, and moreover it has necessarily been managed in a way which increases the risk of loss. The actual number of teachers employed is the same as for some years past, and one less than were in service during the mastership of Mr. Rolfe.

It may be added to what has been said in reference to the amount of work done by the teachers in this school, that the higher

the studies advance the more preparation the instructor requires. The Committee expect of a teacher in the High School more work out of hours than is required in the other schools. They are expected to remain for consultation every day as long as is necessary; and, although they are not prohibited from the instruction of private pupils, they are expected to give their first and fresh energies to the school.

In the year 1868, Saturday sessions were resumed in the High School, and continued in operation for two years. The gentlemen who had special charge of the school became satisfied however, after longer trial, that it was inexpedient to continue them; and they have been abolished. The amount of work done or attempted in them was not considerable. They were considered by the pupils an invasion of the school time for recreation, and appeared to discriminate against the High School as compared with the Grammar Schools. And, moreover, it is a principle that the higher the quality of the work which is to be done the more recreation is required. Under the present arrangement the scholars devote themselves more zealously to their duties, and the master has been able to distribute the work which was formerly done on Saturday among the other days of the week. There is therefore no loss in the amount which is really accomplished.

In addition to what has been mentioned the condition of the floors in the High School building require notice. They were laid down with spruce, — hard pine being out of market at the time on account of the closing of the Southern ports. They are splintering badly, and the whole building will require to be refloored with hard pine very soon.

THE TRAINING SCHOOL.

This school has been in operation about one year, and may now be said to have passed through the experimental stage and settled down to its recognized work as an established part of our educational system.

It was opened in February, 1870, with a very large class of young ladies, and was intrusted to a committee of one from each ward in the city, on a plan whose general outlines only were fixed,

and the details of which it was presumed the large and extraordinary committee in charge of the enterprise were empowered to settle as it became clear what was required.

The original plan contemplated the appointment of a Principal and Assistant; and it was believed that the young ladies of the Training Class would themselves be able to conduct the instruction of the Primary classes in the building, under the general direction of Miss Munroe; while the Principal, Mrs. Sullivan, was to be occupied mainly with the young ladies of the class in training. was supposed at this time that the benefits to be derived from the school would be confined in the main to the Training Class, and that they would receive them from the three sources, of practice in the Primary rooms, instruction in theory and practice by the Principal, and from occasional substitution in other schools.

The Principal and her Assistant, although from the first they doubted the wisdom of some parts of this plan, devoted themselves generously and earnestly to it, and labored with all their might to make the experiment a success. It was found however, after several months of trial, that the plan was defective. Primary classes could not be managed by the young ladies as was attempted. The scholars understood very quickly the difference between them and permanent teachers, and could not be made to respect their authority. And the frequent changes required, to give every one her due proportion of practice in teaching, seemed to doom the classes to be instructed by teachers in the first and most inexperienced stage. As soon as they acquired a little experience and control of the room, and gave promise of doing well, the turn of another would begin, and the round of inexperience would have to be repeated.

In addition to the injustice which was thus done to the class, the Committee found by careful observation that the young ladies themselves did not improve under this method as they should. was found that they needed constant supervision. models of instruction before them, -no standards and no ideas,and required in their practice the continual presence of a competent person to direct them and to form their ideas and habits by

her own example.

These results were duly communicated to the Board; and at the opening of the present school-year, in September, the Committee were able to take a first, and as it has proved a sufficient, step toward the correction of these evils by appointing two additional Primary teachers, — one for each vacant room.

There has been no trouble since. The appointment of these teachers had the further advantage of enabling the Committee to recommend the Board to discontinue the one daily session in the Primary classes of this school, which had been necessary at first, and to re-establish them in agreement with the hours of the other Primaries.

As the school is now conducted, the young ladies of the Training Class have the advantage of as much actual practice in the school-room as they require; but it is always practice under the eye of a competent and paid teacher in charge of the room, whose assistants they are for the time being. In this way the discipline of the room is perfectly maintained. The young ladies have the model constantly before them, and are not allowed to drill themselves into bad habits.

The principle on which the practice of the Training Class is now conducted may therefore be said to be that of practice under constant and competent supervision.

The class are not, however, occupied wholly in such practice or observation in the school-room. They receive daily lessons in theory and practice from the Principal. They are carefully instructed in the ideas which apply to the management of classes and of a school-room. They are taught how to observe and how to teach.

Their hours of attendance are wholly in the morning from 9 A. M. to 2 P. M., and in the afternoon the Primary classes are left to the undisturbed care of their regular teachers.

The instructions given by Mrs. Sullivan are not of the nature of an advanced education, but are designed to give a special qualification for teaching in the Primary Schools. They form a basis of qualification for Grammar School instruction. But the school is not yet organized to train a class for Grammar School instruction, and it is therefore designed to qualify for teaching in the Primaries.

The instructions given to the class cover the ground of theory and practice. They take up great numbers of examples and illustrations, and criticisms of work actually done; and they are in addition an attempt to train the class to those habits of mind which are so important in the teacher, and to give them, from the study of text-books and attendance on elementary lectures, a kind of knowledge which is required in the school-room.

It was supposed at the opening of the school that an important auxiliary of the training work would be substitution in the other Primaries of the city. The numbers in attendance were then inconveniently large, and no harm resulted from the plan.

The school has now, we suppose, settled down to about its normal membership; and the Committee find that it is possible there may be too much rather than too little substitution. It is evident that this practice, if carried too far, would disorganize the class and defeat the ends of the school. The success of the plan requires that the young ladies should remain substantially undisturbed in their work throughout the year. They should be expected to begin the year with the school and remain to the end, and they should not be permitted to act as substitutes indiscriminately, or whenever an opportunity offers, but only under regulation, and as their own progress in the Training School and the interest of the school require.

THE BENEFIT TO BE EXPECTED FROM THE TRAINING SCHOOL, AND THE USE WHICH SHOULD BE MADE OF IT.

This school, to be as useful as it is hoped that it will be, should not be left merely to train and graduate its annual class. It should be in a sense the Normal School of the city, the model and the instructor especially of all the Primary teachers.

It will send forth annually a trained class into our schools, and through them affect very much the whole system of public education. But it is designed to do much more than this, and be an important benefit to every instructor in the city. The statute of the Commonwealth requires the teachers to visit other schools with considerable frequency. This school is provided as one above all others to be visited. Arrangements are made for such visitation,

and it is expected that other teachers will see here examples of what they can do, and models of the way to do it. For the sake of preventing this school from running too much to theory, and losing its practical value and character, it has been kept as it was at first,—no more select than the average. The children come mainly from families which are in no respect above an average condition in life, and what is accomplished with them can certainly be accomplished in any school in the city by any teacher who knows how to do it.

Particularly at the present time, when efforts are making to introduce a freer and more various system of instruction into the Primaries, does the value of such a training become conspicuous. In all plans for school improvement we come back at last upon the character and quality of the teachers; and any one who has taken the pains to examine the course of study adopted during the year past, will observe at once how much more is left to the teachers than formerly. We believe that to be the true system which leaves the most to them, which is consistent with order, and holds them to the widest and closest responsibility for results. Every step of approach to such a system is new evidence of the importance in the system of such an institution as our Training School.

For the information of the public we would say that this institution is not designed to be a select school for any who wish to advance their education or to qualify themselves for the general work of teaching. It is a training department provided by the city for its own use. It is understood that those who derive benefit from it are to repay it by instructing in our schools; and it is not considered that the Committee are under obligations to receive pupils into it in any larger number nor at any other times than is likely, in their judgment, to promote the objects for which the school was established.

Young ladies who desire to enter it should do so at the opening of the year. By the end of the first term the class has advanced so far as to make it difficult for a new pupil to enter with advantage; and we therefore repeat that all persons who wish to avail themselves of the training which is here offered should plan to

begin with the class at the opening of the year, and continue with them to the end.

In the way of a cautionary suggestion, we desire also to state that the diploma awarded to graduates is only a certificate of graduation, and does not of itself entitle the holder to appointment as teacher. Those who have passed successfully through this school are to be treated as preferred candidates; but in all cases of actual appointment the sub-committees act in the use of full liberty to select whom they consider the most promising candidate.

It is proper to add to these remarks that the entire additional expense of the Training School does not exceed \$1,200 per annum.

THE DRAWING SCHOOL.

At the last session of the Legislature an act was passed requiring every city having more than ten thousand inhabitants to make provision for giving free instruction in industrial or mechanical drawing to persons over fifteen years of age, either in day or evening schools, under the direction of the School Committee. In compliance with this act, the City Government early in November procured a room in Hyde's Block, in the Second Ward, and a school was at once opened by the Committee. Professor Chandler, an instructor at the Institute of Technology and a practical architect, was placed in charge of the school; and in December, Mr. Tilden was engaged as his assistant. Ninety persons appeared at the hall at the opening of the school; and during the two months of its existence one hundred and forty — among them carpenters, machinists, carvers, glass-cutters, stereotypers, and cabinet-makers — have availed themselves of its privileges.

The average number of scholars has been one hundred and twenty, and the average attendance about seventy-five per cent. The school has been divided into two classes, each class meeting twice a week. Models, charts, and designs for copying have been furnished by the teachers. Drawing boards and instruments have been purchased by the Committee at a cost of about three hundred and fifty dollars. No further outlay for this purpose will be required for several years, unless the school is considerably enlarged.

Instruction has been given in architectural, machine, and ornamental, or free-hand drawing. One half the pupils study architectural drawing, one fourth machine drawing, and one fourth ornamental drawing or designing. Although the school was at the outset an experiment, and from its unlooked-for size suffered for a time from lack of an assistant instructor and proper room, lights, and instruments, the progress already made has confirmed the Committee in the belief that the school will prove one of the most useful as well as popular features of our Common School system.

It is an attempt to provide some intelligent preparation for the prosecution of industrial labor, to teach mechanics and artisans what has been termed the "alphabet" of their education, to give to boys preparing to work at the carpenter's bench and the machinist's lathe facilities for study corresponding in some degree to the courses in book-keeping and the modern languages, and in the classics and mathematics, by which their fellows are now trained for the counting-room and the college. The welfare of the State is as dependent on the workingmen as upon professional men. skilled mechanic fills no less a place than the educated merchant. Nor can taxation for the training of the one class be supported upon any principles that will not apply to both. The limits of this Report will not allow us to touch upon the many advantages to be derived from the system thus inaugurated by our Legislature; but we fully believe with one of the earliest of its advocates that "whatever brings manual skill again into repute, and counteracts the growing disposition to discredit every means of livelihood that does not consist in 'brain-work' merely, is a positive gain to our civilization."

METHODS OF INSTRUCTION.

The Report of the last year dwelt at length on the course of study and the methods of drill in the schools of the city. We would refer again to those sections as worthy to be remembered.

The power that moves a school is not so much the far away law of the State nor of the Committee, but the nearer and more direct force of personal influence. The larger and freer and better the personality can be made which reigns in the school-room the better. The theory we advocate would be to give the teachers the greatest freedom, and to hold them to the closest responsibility. Teachers are placed in their chair to rule and teach the scholars. That responsibility is theirs alone, and not divided with the subcommittee in charge of the school. The office of the Committee is not that of sustaining the order and discipline of the rooms, but the higher one of inspection, supervision, regulation, and of disciplinary interference only in extreme cases. It is to be presumed that the teachers are competent persons; and the school system should put the class into their care, with as little restriction as possible, and hold them responsible for success.

And so with regard to the method of instruction: the "text-book" and the "course" should neither be imposed nor followed with an iron rigidity. The teacher should have resources of his own. He should continually freshen his exercises with original work of his own introduction. Some of the best teachers have made very little use of text-books at all. Others have not considered it a matter of much importance that they should have "the latest and best." It would be anywhere and everywhere a sign of little invention or capacity should a teacher excuse the delinquencies of his class on the plea that some other text-book was better. It is not the text-book that is to be taught, but the study.

The object of arithmetical drill is not to learn the examples, but to acquire the principles and the discipline. It is a matter of very little significance whether a child can outshine the rest in reading this or that ballad; but it is a matter of great importance what he can do with the column of a newspaper or a book or a letter from a friend.

These principles should be applied to the conduct and preparation of examinations. The teacher who drills his class merely for the ordeal of the approaching examination is drilling them into routine and out of real study. He should conduct all his lessons with reference to life and its work and needs, and aim at a broad mastery of the matter in hand.

There is a tendency in school examinations to run down to a mere show and routine which amount to more as a school amusement

than as an evidence of progress. It may be found that the present system of examination fosters routine work, and could be modified with great advantage. In itself the exercise is good; but when created by a fiction of ambitious masters into the goal of all the year and the end of endeavor, it fosters a narrow, unthinking kind of study, which succeeds better in making the scholars appear well in examination than in fitting them to stand well in the hard work of an advanced standing.

It would be well if the sub-committees, in visiting schools, would act on these principles, and remember that on such occasions they are there quite as much to examine the teachers, to observe their methods, their capacity, their proficiency, and their skill, as for any other purpose.

Another matter which requires attention is the relation to each other of duller and quicker pupils in the same class. Instances can be named in nearly every school of pupils who have found time hanging unemployed on their hands, who have lost interest because they were not employed, become troublesome, and perhaps been suspended from school, merely because they were so much more able and active than the others that the school-course was to them a farce. These are really the best children in the schools, and, above all, the ones to receive care and pains. The system of average lessons breaks down on them, and the question arises, What to do?

Legislation by the Committee will perhaps not reach such a case. Something might be done by arranging frequent examinations for promotion, and thus giving scholars an opportunity to ascend the school-ladder at the rate of speed which is most natural to them. But, above all, teachers should be warned to keep their eyes open to such cases, and make their instruction elastic enough to draw out the most and best there is in every child. It is an easy matter to start difficult questions in very simple lessons, and the teacher should be prepared with them for his brighter scholars. It is well known how deeply Dr. Thomas Arnold of Rugby felt this embarrassment, and how earnestly he warned his assistants to do their duty by the average scholars without impeding the progress of the more gifted.

Complaints are frequently made that pupils of this class memorize their reading lessons and recite them by rote instead of reading them. Such children should have fresh work given them to do continually. They should go over more ground than they now do, and read more new matter. Instead of binding them down to one passage in the vain hope of its being read perfectly, the teacher should remember that it cannot be read perfectly until the child's intelligence has grown. He should aim at attaining what is possible at the moment, and then stimulate his scholars by new and fresh practice. No singing master who understands his work would delay a pupil on one piece of music, however simple, until he could execute it perfectly. Such a course would preclude him from that growth of intelligence and of power of expression which is his only hope of ever being able to execute even the common scale in a perfect manner.

So with learning to read, and with all study. The child must have in its instruction expanse as well as depth. A mile of walking on a piazza is not worth as much as a mile in the fields. The teacher who wishes to be thorough must not drill always, or he will destroy the life and the enthusiasm which is alone equal to the high labors of thorough study. Sometimes he must run and fly and give the class an opportunity to grow fervid in their exercises. These principles apply to the young minds of children as well as to older scholars, and we believe that an ingenious and enterprising teacher will find means of applying them in studies as simple as learning to read and to spell.

HAMLIN R. HARDING,

Chairman ex officio.

ANDREW P. PEABODY,
ALEXANDER McKENZIE,
HENRY P. WALCOTT,
KINSLEY TWINING,
JAMES COX,
EDWARD R. COGSWELL,
CHARLES J. McINTIRE,
GEORGE H. MINER,
SUMNER R. MASON,
JAMES M. THRESHER,
WILLIAM A. MUNROE,
FRANCIS A. FOXCROFT,
PHILIP R. AMMIDON,

School Committee.

TABULAR VIEW

OF

THE PUBLIC SCHOOLS OF CAMBRIDGE,

JANUARY 1, 1871.

NAME OF SCHOOL.	TEACHERS.	 SALARY.	No. of Scholars Jan. 1, 1871.
High School,	Lyman R. Williston .	 \$4,000	280
	William F. Bradbury .	 2,500	
	John Orne, Jr	 2,000	
	Mary F. Peirce	 2,000 1,000	
	Emma A. Scudder	 800	
	Elizabeth M. Fessenden	 800	
	Hannah Gleason	800	
Allston Grammar,	Benjamin W. Roberts .	 2,000	591
	Lizzie B. Winnett	 600	
	Sarah E. Hearsey	 600	
	Sarah D. Whiting	 600	
	Emma F. King	 600	
	Sarah L. Roberts	 550	
	Mary E. Gamwell	 600	
	Lilian L. Hayward Mary Cutler	 600 500	
	Isabel E. Billman	 500	
	Lucia E. Whiting	 500	
	Susan H. Ricker	500	
	Sarah J. Hinckley	600	
Harvard "	Aaron B. Magoun	 2,000	321
	Catharine Richardson .	 600	
	H. Augusta Dodge	 600	
	Ada H. Wellington	 600	
•	Mary E. Wyeth	 600	
	Martha M. Damon	 600	
	Lydia S. King	 600	
Putnam "	Susan F. Athearn	 500	0.50
Lumam	Francis Cogswell Sarah M. Burnham	 2,000	350
	Anna B. Josselyn	 600 600	
	Maria E. Spare	 600	
	Lizzie A. Winward	 600	
	Eva L. Holbrook	 600	
	Minnie E. Metcalf	600	
	Ella R. Grieves	500	

TABULAR VIEW OF THE PUBLIC SCHOOLS (continued).

NAME OF SCHOOL.	TEACHERS.	SALARY.	No. of Scholars, Jan. 1, 1871.
	TO ALL DIVING LAND	\$2,000	333
Shepard Grammar,	Daniel B. Wheeler	600	
-	Emma M. Taylor	600	
	Ella L. Hinman	600	
	Lu A. Butters	600	
	Sara J. French	600	
	Mary C. Cook	600	
	Olive E. Fairbanks	600	
m dila	H. Estelle Varney	2,000	419
Thorndike "	Ruel H. Fletcher	600	
	Eunice B. Dyer	600	
	Martha A. Martin	600	
	Rebecca D. Wing	600	
	Ella W Clark	600	
	Ruth H. Faxon	600	
	Clara Bartley	600	
	Jeanie A. Norris	600	
*	Mary E. Mason	600	
Washington "	Daniel Mansfield	2,000	413
Washington "	Lucy A. Downing	600	
	Adeline M. Ireson	600	
	Catharine P. Green	600	
	Abby M. Webb	600	
	Eleanor M. Butler	600	
	Mary E. Lord	600	3
	Adelaide M. Keith	600	
	Adelaide A. Keeler	600	× 00
Webster "	Alvah C. Smith	2,000	
11 000002	Eliza K. Brackett	. 600	
	Lucille C. Bancroft	. 600	
	Eliza D. Fisher	600	
	Jane Dallinger	•	
	Helen J. Maiers.	600	
	Louise C. D. Harlow	60	
	Isabel B. Merrill	60	
	Gertrude A. Hyde	60	
	Esther F. Hannum	60	
	Susan E. Merrill	60	000
Boardman Prima	Mary F. Emerson	60	
	Mary F. Ball	. 60	0
	Mary F. Stewart	. 60	0
	Mary Agnes Lewis	. 60	00
	Sarah E. Stewart	. 60	00
	Ada W. Baker	. 50	
	Fannie A. Cooke	. 60	
Bridge "		•	00 83
Dinge	Emily C. Dallinger	•	00
City "	Sarah A. Rand	- 1	00 30
Dana "	Abby A. Lewis		00 108
2002	Maria F. Williams	. 60	00

TABULAR VIEW OF THE PUBLIC SCHOOLS (continued).

NAME OF SO	CHOOL.	TEACHERS.	SAI	ARY.	No. of Scholar Jan. 1, 1871.			
Dunster Pri	mary.	Sarah B. Waitt	. 8	3600	155			
	, ,	Susan E. Wyeth		550				
		Mary L. Bullard		450				
		Mary E. Smallidge		450				
Felton	66	Jeanie C. Osgood		600	122			
2 020011		Martha A. Culver		600	122			
		Sarah H. Chase	•	450				
Gannett	66	Sarah J. A. Davis	•	600	179			
Gumoto		Lucy C. Wyeth		600	110			
		Jeanie L. Richardson	•	550				
		Annie F. Harding	•	600				
Harvard	66	Helen J. Ward		600	43			
Holmes	66	Marianne M. Webb	•	600	166			
LIOINIES		Eunice W. Field	•	600	100			
		Julia H. Kimball		600				
		Ella F. Webber		600				
Lechmere	66		•	600	E 77			
Mason	66	Martha J. Avery	•		57			
Mason		M. Lizzie Evans Julia E. Murdock	•	600	179			
			•	600				
)4:-	66	Susan M. Cochrane	•	500	400			
Otis		Abby S. Taylor	•	600	433			
		Lydia A. Whitcher		600				
		Susan M. Pendexter	•	600				
		Martha H. Butler		600				
		Ellen N. Pike	•	600				
		Luvia Goodnow		600				
		Annie Knapp		600				
D 4 .	66	Emma Barrett	•]	600	010			
Putnam		Frances E. Pendexter		600	216			
		Hattie M. Prince		600				
		Harriet A. Butler		600				
	"	Carrie F. Noyes		550				
Quincy		Charlotte E. Jewell		600	89			
1 0	"	Helen E. Morey		600				
Reed St.	**	Lucy T. Sawyer		600	204			
		Evelyn A. Sawyer		600				
		Martha C. Dickman		600				
	.,	Elizabeth A. Tower		500				
Sargent	"	Anna M. Harrod		600	179			
	1	Frances J. Harrod		600				
		Helen M. Kelley		450				
		Priscilla L. Lothrop		450				
Shepard	66	Fanny E. M. Dennis		600	114			
		Adelia Dunham		500				
		Charlotte A. Ewell	1	500				
Γ horndike	"	Mary E. Willis	- 1	600	90			
		Helen L. Shepard		500				
$W{ m ebster}$	66	Mary A. Tarbell		600	169			
		Mary E. Sawyer		600				
		Fanny E. Cooke		500				

TABULAR VIEW OF THE PUBLIC SCHOOLS (continued).

NAME OF SCHOOL.	TEACHERS			SALARY.	No. of Scholars, Jan. 1, 1871.
Williams Hall Primary, Training School,	Anna S. Lamson . Kate M. Lowell . Anna C. Sullivan Emma F. Munroe M. Etta Arkerson Ella C. Whitney .	 :	•	\$600 500 1,000 800 500 500	92 169

Teacher of Singing,—Nathan Lincoln, \$2,000.

SUMMARY.

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•••	f p	46 66	High Gram Prima	ma	ro	спо	ols ls .	:	•	:	•	:	•	•	•	•			-	280 2987 3216 ————————————————————————————————————
				CC	ST	OF	IN	ST	RUC	TI	on.									
High Sch Grammar Primary Music	ool Sc	hools					313, 49, 40,		000000000000000000000000000000000000000				•	for 	eac	6	pup " "	oil,	1	9.64 6.52 2.43 .31
						\$	105	.25	0										\$1	6.23
Number	••	pupils l				Pu	blic			ols	, J	an.	1, 1,	187 187	'1 '0		:	:		$\frac{6483}{6187} = \frac{6483}{296}$
Increase																				$\frac{272}{172}$
"	66	F	1861				•		•	•	•	•	•	•	•	•	•	•	•	262
"	"	66	1862						•	•	•	•	•	•	•	•	•	•	•	226
44	"	66	1863						•	•	•	٠	•	•	•	•	•	•	•	200
66	"	"	1864						•	•	٠	•	٠	•	•	•	•	•	•	58
66	66	"	1865								•	•	•	•	•	•	•	•	•	243
66	66	44	1866						•	•	•	•	•	•	•	•	•	•	•	286
66	66	66	1867						•	•	•	•	•	•	•	•	•	•	•	330
"	"	66	1868								•	•	•	•	•	•	•	•	•	20
"	66	66	1869									•	•	•	• •	. •	•	•	•	296
"	66	"	1870											•	•	•	•	•	•	290
Number	of	School Teache	s				:			:	:			•	•					$\begin{array}{c} 29 \\ 145 \end{array}$

REPORT

OF THE

SUPERINTENDENT OF SCHOOLS.

To the School Committee of Cambridge: -

Gentlemen, — The close of another year renders it my duty, in conformity with your Regulations, to submit my Annual Report. In thus complying with your requirements, my only aim will be to present the results of my observations during the year in such a manner as to aid you, in some measure, in forming a correct estimate of the present condition of the schools.

I submit a few statistics, which, though not of general interest, are yet of some value to any who care to make themselves acquainted with the growth of our school system:—

POPULATION.

Population of Cambridge	е.	•		•	٠		•			•	40,000
Number of children from	m	five	to	fift	een	yea	ars	of			
age in May, 1870		•		•				•	80	086	
Number in May, 1869	•	•				•	•		75	571	
Increase for the year .		•		•				•	E	515	

SCHOOLS.

- 1 High School.
- 7 Grammar Schools.
- 21 Primary Schools.
 - 6 Evening Schools.
 - 1 Evening Drawing School.

SCHOOL-HOUSES.

Whole number of school-houses	23
For the High School	
Whole number of school-nouses For the High School For the Grammar Schools For the Primary Schools 15	
For the Primary Schools	
Estimated valuation of school-houses, lots, furniture, librated	aries,
and apparatus, \$450,000.	
TEACHERS.	
	8
Number of teachers in High School	O
Male teachers, 4; female teachers, 4.	67
Number of teachers in Grammar Schools	01
Male teachers, 7; female teachers, 60.	69
Number of female teachers in Primary Schools	10
Number of teachers in Evening Schools	10
Male teachers, 6; female teachers, 4.	2
Number of teachers in Evening Drawing School	Z
Whole number of teachers in Day Schools, including	- 45
teacher of Music	145
PUPILS.	
Average whole number of pupils belonging to the Day	F 77 9
Schools during the year ending February, 1010	5772
A vorage daily attendance of pupils in all the Day Schools	5000
for the year	5328
A vergge per cent, of attendance of all the Day Schools .	92.3
A can now cent of attendance in the High School	93.2
A of attendance in the Grammar Schools.	93.3
A regard per cent, of attendance in the Frimary Schools .	90.6
Number of pupils over fifteen years of age attending during	
the group	514
Average number of children from five to litteen years of	
and not connected with the Public Schools	1800
Age at which children are admitted to the Primary Schools	5 yrs.
Number of pupils admitted to Grammar Schools	000
Number of pupils graduated from Grammar Schools	144
Number of pupils admitted to High School · · · · ·	128
Number of pupils graduated from High School	43
Milliner of hubin Stragger 17.11	

EVENING SCHOOLS.

Whole number of pupils belonging to the Evening Schools										
Average attendance in Evening Schools	50									
PRIVATE SCHOOLS.										
Whole number of Private Schools	18									
Number of pupils in Private Schools 6	30									
FINANCES.										
Assessed value of real and personal estate \$43,097,200.	.00									
Total amount of taxes levied 975,518.	.19									
Cost of instruction in the Public Schools 101,180	.88									
Care and repairs of school-houses	.77									
New school-houses	.74									
Incidental expenses for school purposes 1,747	.97									
Total expenses for schools	.36									

The year just closed has been marked by an unprecedented number of changes in our corps of teachers. Death has entered our circle, and has removed one whose place in the school-room cannot easily be filled, and whose loss will long be felt. Miss Sarah McKay, assistant in the Putnam Grammar School, had taught in Cambridge but little more than one year; but in that time she had succeeded in winning the earnest love of her pupils, and the entire confidence and esteem of all her associates.

The whole number of teachers appointed to permanent positions during the year was thirty-three: of these, two were chosen to fill vacancies in the High School, eighteen in the Grammar Schools, and thirteen in the Primary grade.

To this list might be added those who have been employed in the Evening Schools and the Drawing School, and also quite a large number who have taught a portion of the year as substitutes or as temporary teachers.

If now it be added that an unusual number of transfers from one school to another have also been made during the same time, no one will fail to see that so great a number of changes could not

have occurred without, in many instances, retarding the progress of the schools.

A serious question with us is, how to secure and how to retain such teachers as we desire to see in our schools. The Training School is doing an indispensable work in this direction, but it is entirely inadequate to supply all who are needed; while, at the same time, it will always be true that for many positions we shall deem it expedient to appoint only those who have had successful experience, either in this city or elsewhere.

It has been clearly demonstrated within the past few months, that we can neither retain all whose services we desire, nor can we, in all instances, secure from neighboring towns and cities, those whose merits entitle them to consideration. Nearly one half of those who have resigned during the year have done so in order to teach elsewhere, or to engage in other pursuits more remunerative; and among these have been some of our best teachers. In the endeavor to fill existing vacancies, the members of your Board have had abundant proof of the difficulty of securing teachers possessing the requisite qualifications.

It seems important to state in this connection that the system of large rooms still existing in our Grammar Schools, and to some extent in the Primary Schools also, has frequently much influence in depriving us of excellent teachers, who would otherwise accept the positions which are tendered them. Many teachers feel that a room of suitable dimensions, even with a smaller salary, is preferable to one of our large rooms, notwithstanding the fact that a small increase of salary may accompany it.

I can conceive of no question relating to the schools of higher practical importance than that which has to do with the appointment of instructors.

There is no other possible way in which the schools of this city can be so directly and so materially improved as by seeing to it that none but efficient teachers are appointed to the vacancies that may occur.

It is of infinitely more moment that we have good teachers than that our text-books be admirably adapted to the purposes for which they were designed, that our school-houses be commodious and elegant, or that our school legislation be wise and judicious.

SCHOOL-HOUSES.

The subject of school accommodations has not the merit of novelty, but still it is one of much importance, and hence demands careful consideration.

Something has been done the past year towards improving the character of our school buildings.

In Ward One it was felt that a new school-house was needed for the Washington Primary, and accordingly a wooden structure, containing seats for 224 pupils, was erected on Hilliard Street; and immediately on its completion the school was transferred to it, under the name of the Holmes Primary. This gives to the Grammar School an additional room, which was much needed; since it has, for several months, suffered great inconvenience on account of its crowded condition.

The great advantage, however, is that pertaining to the Primary School, which is now, for the first time, in the enjoyment of the privileges afforded by well-arranged, cheerful, and convenient school-rooms.

The Quincy School is most unfavorably located; and, although it is a costly building, it furnishes accommodations for only about one hundred children.

I venture to suggest, as a matter of great importance, that this school-house and the lot upon which it stands be sold, and with the proceeds a building similar to the one on Hilliard Street be erected on some street leading from North Avenue. In this way, without incurring any additional expense, we can secure a building which will accommodate twice the number of pupils now provided for in the Quincy.

Some change seems imperatively demanded. That large section between Porter's Station on the north, and the Common on the south, and extending east to Baldwin Street,—a distance of nearly one mile from the Quincy School-house,—a section where the population is rapidly increasing,—is less favored in its school privileges than any other portion of the city. So great is the distance to the public schools that many parents feel compelled to place their children under private tuition. Already much complaint

comes from this district, and this will continue unless something shall be done to relieve the wants at present existing.

In Ward Two there is, at present, a sufficient number of sittings for the Primary pupils in the several districts. Some of the school-rooms are, to be sure, in a very unsatisfactory condition; but it is not advisable to dwell upon this at present, since many changes will soon be made in the organization of these schools; and when this occurs, their real wants will be much better known.

The progress made during the past few months towards securing a new building for the Harvard Grammar School is most gratifying; and the residents of this long-suffering district can now be congratulated on the prospect of a speedy completion of a schoolhouse which will be an honor to this portion of the city.

It is confidently believed that in the construction of this building all needless expense will be avoided; while, at the same time, it is hoped that for comfort and convenience it will not be surpassed by any similar school-house in the State. The thanks of all interested are certainly due to those gentlemen of the City Council having the matter in charge, for the care exercised in securing an eligible site for this structure, and for their pains-taking efforts in selecting suitable plans for the same.

In Ward Three one year ago the Primary Schools were in a crowded condition; while, at the same time, both Grammar Schools needed increased accommodations. As one means of removing the difficulty, it was wisely decided to remodel the Otis School-house. This building, like most of those constructed on the large-room plan, had a large amount of useless space. There were but five rooms—three large rooms and two recitation-rooms—that could be occupied; and in these there were seats for about 275 pupils; but of this number one hundred and sixty were quartered in one large room or hall. The absurdity—I ought rather to say the cruelty—of such an arrangement was never, as I think, half appreciated.

By the change which has been made, eight pleasant and commodious rooms are secured, which will accommodate about 450 pupils; and now this becomes, in many important respects, the best Primary school-house yet completed in Cambridge.

The expense at which this has been secured is of importance as

having a bearing upon the reconstruction of other large-room buildings. The cost, exclusive of the outlay for furniture,— which, for obvious reasons, should not be included,— was but \$3,396.52. The gain in the number of seats was not less than one hundred and seventy-five. This gives the cost per seat \$19.40. The cost per seat in the Holmes Primary, although the house is of wood, and planned and constructed with great economy, was, exclusive of furniture, about \$51.00. The cost per seat in the Willard Primary now building in Ward Four will not be far from \$70.00.

Aside, then, from the consideration of securing rooms suited to the work of a school, in place of those in every respect most unsatisfactory, it is plainly evident that in no other possible way could this number of sittings have been secured with so small an expenditure.

A change was also made during the long vacation in one story of the Putnam School-house.

In this case the two large rooms were divided, making four single rooms. The entire expense of the change was but \$819.00. Forty-five seats were gained, showing the cost of each to be \$18.20. Thus it will be seen that for the seats gained in the two houses remodelled the expense was but one-third of that for the same number of sittings in the Holmes Primary, and not more than one-fourth the amount required for a corresponding number in the Willard Primary.

I am not willing to leave this without suggesting that more than a question of dollars and cents is involved in the changes which have been made.

The greatest gain, after all, is in the increased efficiency of the schools, which only those familiar with their daily work can fully understand.

What shall be done the coming year in this Ward? The cry is still for more room. For months there has been no Primary School to which children could with propriety be sent, and the subcommittees have had much difficulty in finding places in which to put the numerous applicants. It should also be stated that there is every reason to believe that, at the opening of the schools next September, both Grammar Schools will need larger accommodations.

I cannot see how the wants of this section of the city can be satisfactorily met except by erecting a building suited to the purposes of a Primary School.

In Ward Four the Willard Primary — a fine brick structure now in process of erection — will be ample to meet the wants which

have so long existed in this Ward.

It was found necessary early in the year to obtain quarters for a portion of the primary pupils in Ward Five; and the Ward Room was selected as best adapted to the purpose.

It is not worth while to discuss the disadvantages of having a school permanently established in a room which is frequently used for city purposes, which has no yard-room whatever, and where the children are a source of annoyance to the firemen who

occupy the remaining portion of the building.

The greatest objection, however, is the danger to which the children might be exposed in case an alarm of fire should occur at recess, or at the close of a school-session. It was undoubtedly the best arrangement that could be made at the time, but it is hoped that other accommodations will soon be furnished. The Shepard Primary and the Reed Street are both full, and already considerable inconvenience has been experienced in transferring pupils from one school to the other for the sake of filling every seat that might in any case become vacant. The Shepard Primary must very soon surrender its room to the Grammar School; and furniture suitable for the Grammar grade has already been placed in it.

It seems very clear that the Primary School should be removed

from the building at the close of the summer term.

I feel sure the next few months will demonstrate the correctness of my views of the wants of Ward Three and Ward Five. It is for you to suggest the remedies.

It will be remembered that the importance of remodelling one or more of the Grammar Schools has often been urged, and the

reasons presented are familiar to you.

The expense involved in a change of this kind has heretofore prevented any action in this direction except in the Putnam School to which I have alluded. It now seems that the time has come when, on the score of economy, to say nothing of other considera-

tions, one Grammar School should be reconstructed. The Washington School, having an increase of seventy pupils during the year, has been compelled to occupy its entire building.

Should there be anything like a corresponding increase the present year, the school must overrun the limits of the school-house as at present arranged. In fact, it is now clearly evident that, upon the organization of the school in September, no proper arrangement of classes can be made on account of the straitened condition in which the school will then be. By the change proposed, a building having five large unwieldy rooms, several dark and incommodious dressing-rooms, halls that are simply narrow and ill-constructed entries, and stairways so arranged as to cause the most serious apprehensions for the safety of the children in case of an alarm of fire during a school-session, will be converted into a structure which, in all important respects, will be equal to the best models. Twelve fine class-rooms will be secured; while at the same time the stairways, dressing-rooms, and halls will be inferior to those of no building in the city.

A most important consideration in connection with this, as I have intimated before, is that by the change we shall obtain an increase of not less than one hundred and fifty seats; and it can easily be demonstrated that these sittings can be secured at a much less expense by remodelling the present building than by erecting a new structure of brick, or even of wood.

I am inclined to repeat the suggestions made one year ago with reference to the general care of the school-houses, and their cleanliness and good order. I then said that the condition of the schools in these respects was far from satisfactory. I now feel compelled to say that there has been no marked improvement during the year.

I venture to suggest that the fault is in the system. The yards and out-buildings will not be kept in proper condition, the school-houses will not be well heated and well cared for, repairs so constantly needed will not be promptly made, until there shall be some person who, by constant inspection, shall be familiar with existing wants, and to whom irresponsible persons, discharging important duties, shall be held accountable. I deem it of great importance also, as I suggested in my last Report, that a careful

and systematic inspection of all the school-houses be made at the close of the summer term, in order that needed repairs may be made during the long vacation; and that thus the schools may be interrupted as little as possible during the year. The furnaces, especially, should be carefully examined; since they are frequently found to be entirely unfit for the purposes intended, even when not, as is sometimes the case, positively dangerous.

PRIMARY SCHOOLS.

In passing to the consideration of topics more directly connected with the work of the year, it seems of importance to notice the changes recently made in the course of study in the Primary Schools. The wisdom of supporting, at the public expense, schools in which the children of the people may receive instruction, is no longer in this community a subject for controversy. The only question now is, what to teach and how to teach. Upon the former part of this question, opinion seems more and more divided with the lapse of time.

In no department of the school-course are principles so settled that we can confidently declare that proposed changes in a plan of With us a revistudy will be for the best interests of the schools. The importance of sion of the course of study seemed demanded. some change will best be understood by noticing a few of the There were five defects apparent in the former Plan of Study. classes, - four besides the alphabet class; and it was found that the work was so distributed as to render it probable that most pupils would spend four years in the school after leaving the alphabet Practically, then, the course covered a period of about five years, and scholars advancing by regular steps consumed nearly that time in preparation for the Grammar Schools. This seems too long a time for the amount of work required, and doubtless might have been shortened had the studies been differently distributed through the course. As regards the subjects to be taught, the programme itself best shows its deficiencies.

The powers of the letters were not required, notwithstanding the fact that experience has shown that in no other way can the natural defects in articulation be so easily overcome as by teaching with care and exactness the elementary sounds which alone constitute the spoken language.

Nothing of number was taught until the child reached the second class; and then the instruction was chiefly, if not wholly, of an abstract character. The pupil was taught to read figures, but did not practise making them till he entered the Grammar School.

Neither drawing, printing, nor writing was required; in fact, the Plan of Study did not recognize the importance of slate exercises of any kind, and until within a short time slates, in most of these schools, were unknown.

Oral instruction was also practically ignored, except where the enterprise of the teacher rose superior to the bounds set by the programme. As a proof that the faults did not consist entirely of omissions, it should be mentioned that much time was consumed in the hardest kind of drill upon Roman numerals representing numbers so large as to be utterly incomprehensible; punctuation-marks whose names have, in some strange manner, been preserved to vex the present generation; and abbreviations in endless variety.

Thus, as has been said, it seemed expedient to introduce some changes.

Early in the year, in a meeting of teachers called for the purpose, a committee from their number was appointed to aid in the preparation of a new course of study. Several meetings of this committee were held, in which the proposed changes were fully discussed. The result of this was a Plan of Study, which, with some modifications by the sub-committee of your Board having the matter in charge, was finally adopted.

Although you are familiar with its provisions, I have thought it advisable, for certain reasons, to present it here. It is as follows:—

PLAN OF STUDY IN THE PRIMARY SCHOOLS.

FIRST YEAR.

FIRST TERM.

Reading and Spelling. The elementary sounds and names of the letters to be learned from the blackboard and from charts. Primer to the 30th page. Spelling from the reading-lessons by sounds and by letters.

Numbers. Develop these as far as ten by the use of objects. Count to one

Simple exercises in adding, by using the numeral frame, marbles, hundred. beans, &c.

Drawing and Printing. Drawing Cards 1, 2. Print the reading and spelling lessons, and the Arabic numerals as far as learned.

Oral Instruction. Lessons on the senses; on the form, size, and color of common things.

SECOND TERM.

Reading and Spelling. Primer completed. Spelling as in first term.

Numbers. Counting by twos to one hundred, forward and backward. Reading and writing Arabic numerals to 50.

Simple exercises in adding and subtracting, using objects or the numeral frame.

Roman numerals to xx. Cards 3, 4, 10. Printing reading and spelling lessons on Drawing and Printing.

The human body, its chief parts; articles of clothing and the slate. Oral Instruction. food; days of the week; months of the year; the seasons.

SECOND YEAR.

FIRST TERM.

Reading and Spelling. Hillard's Second Reader to the 90th page. Speller to the 25th page. Spelling from the reading-lessons.

Numbers. Half of the addition and subtraction tables, with a variety of miscellaneous exercises illustrated by objects. Roman numerals to L. Writing Arabic

Drawing and Printing. Cards 5, 6, 7. Printing words from the reading and numerals to 100. spelling lessons. Construct tables of numbers.

Oral Instruction. Domestic animals; the primary colors; trees and flowers.

SECOND TERM.

Reading and Spelling. Finish the second reader. Third reader to the 71st page. Spelling the columns of words, and words selected from the reading-lessons. Speller to the 37th page.

Numbers. Addition and subtraction tables completed. Writing of Arabic numerals to 500. Simple exercises in adding numbers upon the slate. Roman numerals to C. Eaton's Primary Arithmetic to the 38th page.

Drawing and Writing. Cards 8, 9, 11. Small script letters. Writing words from the reading and spelling lessons. Constructing tables as before.

Oral Instruction. Trees and flowers; wild animals, metals, building materials, and common household articles.

THIRD YEAR.

FIRST TERM.

Reading and Spelling. Hillard's Third Reader to the 132d page. Spelling from the reading-lessons as before. Speller to the 49th page.

Numbers. Review addition and subtraction tables. Half of the multiplication and division tables. Reading and writing Arabic numerals to 1000. Simple slate exercises in addition and subtraction. Roman numerals reviewed. Eaton's Primary Arithmetic to the 64th page.

Drawing and Writing. Card 12. Plates 1 and 2. Writing words from the reading and spelling lessons.

Oral Instruction. Trades and occupations; common phenomena of the air, earth, and heavens.

SECOND TERM.

Reading and Spelling. Hillard's Third Reader completed. Speller to the 61st page. Spelling from the reading-lessons.

Numbers. Tables completed and reviewed. Reading and writing numbers to 10,000. Slate and blackboard exercises in adding and subtracting numbers and in multiplying by one figure. Eaton's Arithmetic to the 82d page. Roman numerals reviewed.

Drawing and Writing. Plates 3 and 4. Writing continued.

Oral Instruction. Continue lessons on physical phenomena, measures, and distances. Review some of the most important topics.

General Directions. The oral teachings must receive daily attention. Singing and physical exercises must be attended to at least once in each session throughout the course. Verses and maxims are to be taught occasionally through the course. All incorrect or inelegant expressions should be noticed and corrected.

The names of the punctuation-marks are to be taught as they occur in reading.

A few abbreviations in common use should be taught in the higher classes.

In all the lessons the teacher must not rely on the text-book, but chiefly on oral instruction, using the blackboard, chart, and whatever else her ingenuity may suggest.

In reading, special attention should be given to distinctness of articulation Correct emphasis and inflection will be best secured by imitation, and by calling attention to the meaning of what is read.

It is not claimed that this course of study is perfect: it may be found that in essential respects it is exceedingly faulty; but it is believed that in its general scope it is much better adapted to the wants of this grade of our schools than that which it displaced; while defects that experience shall make manifest can easily be remedied.

The time for accomplishing the work, according to this programme, is three years; but since we now promote to the Grammar Schools but once during each year, and yet admit children to the Primary Schools whenever they apply, the result will be that a large number of the pupils will remain in the schools more than three years; while, at the same time, it will doubtless be found that, by promoting individual pupils whenever their attainments will warrant it, many will complete the course in less than the prescribed time.

Each year is divided into two terms, which will be a convenience under present arrangements, and will necessitate no change, if, as has been proposed, the plan of semi-annual promotions to the Grammar Schools should hereafter be adopted. It may be found that more work is required in certain branches than can be done, and well done, in the time allowed for it. Should experience develop such faults, the remedy will be easily applied.

It will be impossible, for the present, to have an exact classification under this programme, on account of the fact that, in much of the work, quite radical changes are made, affecting, more or less, the relative position of all the classes. This is best illustrated by a reference to the subject of number, which is now to be taught in some form, almost from the time the child enters the school; but, under the other programme, it was deferred to a period much later; so it must follow that there are at present certain classes which are qualified, in reading and some other branches, for a given grade, but cannot now be classified in that grade because of deficiencies in the subject of number, or in other branches heretofore postponed to a much later period of the course.

It will require one or two years to determine precisely whether the work has been judiciously distributed, and to settle other questions that may arise.

I desire to add that the teachers of this grade have shown a most commendable zeal in carrying out the provisions of the new course of study, and are laboring earnestly to achieve success under it. I believe there has been real progress in these schools during the year. There is more teaching than ever before, which is equivalent to saying that there is better teaching than ever before.

Teachers begin to appreciate the fact that oral teaching—oral lessons and illustrations—must have a prominent place in connection with every recitation, whether it be reading, the "tables," or other branches. I am sure I am correct in claiming that there is less hearing of lessons, and more real instruction, than ever before. I think we want still less of the former, and more of the latter. Much is already gained, much remains to be accomplished. Very seldom now is a lesson given out by the teacher without some explanation on her part of those difficulties

which would be sure to prove a source of discouragement to the child, if he should meet them without previous preparation.

I am not sure, however, that all teachers yet see the great importance of teaching scholars to study, and of studying with them; of teaching the difficult thing in the lesson, before the child has had an opportunity to store up errors, which are so hard to correct.

And here I desire to say, lest I be misunderstood, that I am by no means suggesting that the teacher should do the pupil's work; I only say that she should, in all cases, anticipate that which the pupil cannot do, in order that he may intelligently perform that which lies within his ability. The work of the instructor is less limited in some branches of study than in others; in reading, for instance, it seems almost literally true that all the child gains he draws directly from the teacher. We must show pupils how to read rather than tell them how it should be.

Good reading implies, among other things, distinct articulation; but this the instructor must *teach*, else it is not acquired. It also implies correct emphasis and inflection, and these are taken from the very lips of the teacher; for how can they be taught except by imitation?

To be sure, correct emphasis and inflection do imply an understanding of what is read; but it is peculiarly the duty of the teacher to lead the child to a comprehension of the meaning of word, phrase, paragraph, or lesson.

I am pleased to believe that most of the primary teachers accept the truth that the greater the amount of live, wide-awake, intelligent teaching, the greater the excellence of the school. As regards the matter of instruction in our schools, there is no more hopeful sign than the evident desire of most of the teachers to make themselves acquainted with the best methods of imparting knowledge in the different branches taught. This is as it should be. The teacher who is not willing to be a learner is hardly fit to be an instructor.

GRAMMAR SCHOOLS.

In calling your attention to this grade of our schools, I deem it safe to say that the year just closed has witnessed a real advance in many important respects.

I trust this remark will not be regarded as one of those general statements which so easily find their way into a Report of this kind. Of course such a statement does not apply to every department of every school; but it does belong to *some* department of each school, and certainly is true of the schools as a whole.

So much of what has been said of the gain in the amount and quality of the teaching in the Primary Schools is also applicable to this grade that I shall not dwell upon the details as I should otherwise feel called upon to do.

In general, then, it can be said that while the instruction has, in all branches, been fully up to the ordinary standard of excellence, in some, especially in those which from the nature of the case demand most freedom on the part of the teacher, and least adherence to text-book routine, there has been very marked progress.

As in the Primary Schools, so here, difficulties are anticipated, while explanation and instruction bear their due share in investing the otherwise dry and incomprehensible subject with interest and life. If the evidences of skilful, thorough, and exact work have not been so general as could be desired, still they have been sufficiently so to warrant us in anticipating much for the future.

Some changes worthy of mention have been made in the course of study. Hillard's Intermediate Reader has displaced the Sixth, which was thought to be ill-adapted to the capacity of the children in this grade of the schools. Walton's Written Arithmetic, which was deemed too difficult, has given place to Walton's Practical, which certainly is not open to the same objection.

Drawing has been a branch of study in the schools more than one year, this city having thus anticipated the recent State legislation making it a requirement throughout the Commonwealth.

Another important addition to the course of study was the introduction of Hooker's "Child's Book of Nature," which, it is hoped, will supply a want which has long been felt in the direction of general instruction.

Still another subject was introduced, which was indicated by adding to the Rules and Regulations the following: "The composing and writing of sentences shall be begun with the Sixth

Class, and continued, as a frequent exercise, through the course."

This is a step in the right direction. The design is to enable the child, through the instruction and practice which will now be given, to express neatly and correctly any simple idea he may have in his mind. If any one doubts the necessity for this kind of instruction, let him call upon the pupils of any school, where there has been no previous preparation, to put upon paper a few sentences descriptive of something with which they are entirely familiar, or test them in any other similar manner, and it is believed the result will show that the weakness in this direction is more marked than in almost any other department of the schoolwork.

Before leaving this, it should be suggested that Drawing, the "Child's Book of Nature," and the composing of sentences are additions to the work required in the Grammar Schools. They displace no other studies, and the labor demanded for other branches is but little less on account of their introduction. Now as it is unfortunately true that neither teacher nor pupil can well do two things at the same time, it is quite possible that experience will show that some relief in certain branches will be demanded. I think the desired object can be attained by eliminating from the course some of the requirements which are, to say the least, of doubtful utility. Having, however, no plan at present matured, I can only suggest that in my judgment Defining, as generally taught and as contemplated by the regulations requiring it, may well be spared from the course. The importance of teaching the meaning of word, phrase, or sentence, so that the child may have an intelligent idea of what he is reading or studying, cannot be too strenuously insisted upon, and is not fully appreciated by most teachers. So, too, the pupil should be made familiar with the use of the Dictionary, in order that he may derive real assistance from frequently consulting it. Still I say that the exercise called Defining is generally so mechanical in its character as to be worse than useless.

I deem it simply a matter of duty once more to enter my earnest protest against the system of large rooms still existing in many

of our schools. Never before were the evils so apparent as now. In every study, but more especially in such branches as have recently been introduced, we are hampered more than can be appreciated except by those familiar with the actual work of the school-room. Many of the failures in discipline during the year are directly traceable to the large number of pupils under the charge of the teacher. But since I am well aware that the judgment of every member of your Board entirely accords with my own upon this subject, it certainly is useless for me to dwell upon it.

HIGH SCHOOL.

The changes which have occurred in the High School during the year, as well as other matters of interest connected with it, are given so fully in the Annual Report that little, if any thing, need be added.

The school was never in a more prosperous condition than at the present time. Having an excellent corps of instructors, and possessing the entire confidence of the community, the future is full of promise.

It may now confidently be claimed that in thorough and successful work this school is second to no similar institution in the State, or indeed in New England. In the examinations for admission to Harvard University, the graduates of the High School have, by their success, shown themselves equal in acquirements to those from the most celebrated schools in the country; and have thus, on several occasions, won for the school the very highest honors.

Of the last class sixteen were admitted to Harvard, seven of whom entered without conditions. Of those admitted, two were from the Second Class,—a fact which speaks well for their ability and industry, as it also does for the excellence of their instruction.

I deem it proper to say, also, that this school is more than a classical school, since, with the excellent arrangement of its different courses of study, it offers a good, thorough, practical education to every boy or girl who is qualified to perform the work required. It is not a school for special training for any par-

ticular vocation in life, and never can be; and hence it will not be a rival of those professional schools which have, and must have, a field peculiarly their own. Still I hold that the school offers to its pupils instruction which is, in the truest sense, practical, and that it most admirably meets the wants of this community.

TRAINING SCHOOL.

Less than one year has elapsed since the organization of the Training School; so that, had it been, in any true sense, an experiment, it would now be too soon to speak of results with any degree of positiveness. Still I desire to express, most unequivocally, the opinion that a full acquaintance with the actual work of the school thus far, and a comprehension of the fundamental ideas governing it, would remove the doubts that any one may have entertained, at the outset, regarding the expediency of establishing such a school in this city.

Certainly the success of the school up to the present time has been more marked than we had any right to expect. The teachers have proved themselves most admirably qualified for their work, and have given efficiency to every department of the school. Fears have sometimes been expressed lest the children in this school should suffer on account of the multiplicity of instructors. Experience, which is always so much better than mere theory, has already proved such fears to be groundless. The Primary classes are, in every respect, in most excellent condition, and are doing thorough and successful work. The testimony of many of the best teachers of other Primary Schools confirms my own opinion that at least some of the classes of the Primary department of the Training School are already furnishing examples of such excellence in Primary school instruction as to make this school, as was intended, a model Primary School.

The Training School is doing just the work that was expected from it. Of the young ladies who have thus far been members of the school, some have been convinced, as they could have been in no other way, that they had not the requisite qualities for the teacher's vocation, and hence have ceased to be applicants for positions in our schools; while others have shown an aptness to teach,

and have been preparing themselves for the special work for which they have proved themselves fitted.

I find that thirteen who have been members of the Training School now have permanent positions in the city; and that three, also residents of Cambridge, who were members of the last class in the Boston Training School, have received appointments,—making, in all, sixteen recently elected who had received the benefits of special training. Some of these young ladies are occupying most difficult positions; but, so far as I am aware, the success of all is highly satisfactory.

I believe most sincerely that the Training School will commend itself to the judgment and sympathies of all who make themselves acquainted with the work it is doing, and the place it occupies in our school system.

EVENING SCHOOLS.

I find nothing in the history of the Evening Schools for the past year to demand extended notice. The object for which these schools were established, and the importance of the work they are doing, are both well known to you.

It is now pretty generally accepted throughout the Commonwealth, as well as in other portions of the country, that they meet a want that can be met in no other way.

I have always claimed that the money granted for this object was most judiciously expended. The cost of the Evening Schools for the year was but \$1,354.42; while nearly four hundred persons, many of them adults, were brought under the influence of their instruction.

The small expense involved in carrying on these schools is of little consequence, when compared with the advantages resulting to the community from the diffusion of intelligence among the ignorant, who are here, as elsewhere, a source of such great weakness, socially and politically. Doubtless the statutes of the Commonwealth will soon recognize Evening Schools as a part of the school system of the State; but I cannot forbear expressing the opinion that legislation will not then be complete until the law lays its hand more firmly upon the children of the citizens, and declares that the

welfare and safety of the State demand that they shall be educated. We must have in this country a system of compulsory education, one that shall be such in reality as well as in name. Ignoring this as the correct principle, we have seen, within the last thirty years, many wiser nations leaving us far behind. By practically allowing each parent to educate his child or not, as he chooses, we are seeing ignorance increase in all parts of the country with a rapidity that may well alarm us. Notice a few facts furnished in the recent Report of the Commissioner of Education. In 1840 there were in the United States 549,850 white persons over twenty years of age unable to read and write. In 1850 this number had increased to 962,898; and in 1860 it had become 1,126,575. Adding to this last number 1,745,536 adult colored persons also illiterate, and we have the alarming aggregate of 2,872,111, or nearly three millions wholly unable to read and write. From facts given in this Report, it seems evident that the returns for 1870 will show that this evil is still increasing with startling rapidity. What are the facts relating to this State, - a State which boasts so much of its system of common schools? In 1840 the number of white persons unable to read and write was 4,448. In 1850 it had become 27,539; and in 1860 it had reached the large number of 46,262. Doubtless the number is now very much larger, and is increasing so rapidly in proportion to the increase of population as to show a much larger per cent. of illiterate persons than at any previous time.

I mention these facts because they seem to me important, and because I believe we are all called upon to use whatever influence we have in securing legislation sufficiently stringent to teach parents that the State has rights which they are bound to respect.

VOCAL MUSIC.

Some important changes have recently been made in the department of music in the Primary Schools. Until within a few months, the singing-master was expected to visit the different classes once each week, and personally to give the entire instruction required by the regulations. With the rapid increase in the number of schoolrooms, it was found impossible for such a system to continue. In October last, Mr. Lincoln, instructor in this department, addressed

a letter to the Committee on Music, setting forth the difficulties under which he was laboring, and suggesting, as a remedy, a plan which was afterwards adopted by your Board. This plan is best described in the letter to which I have alluded, and from which I venture to quote a few paragraphs.

"The musical instruction is to be given by the regular teachers, each in her own room; and this to be under the superintendence of the Singing Master. This is the system which has been followed for several years in the Boston schools; is going into operation this very month in Philadelphia; has been adopted in the Salem schools for the last year; and is the system which will prevail, I think, wherever music is taught in Primary Schools. I have already taken steps in that direction. With the consent of the Music Committee of 1868, I requested the teachers in the Primary Schools to allow the children to study, during the week, certain exercises which I left on the board. It was entirely voluntary on their part, and I was delighted to see what progress was made. To be sure, some teachers did little or nothing; but very many of them never failed to show me their classes, from week to week, perfect in the task assigned. I found - what I had been prepared for by observation among the Boston schools - that those of the teachers whose classes showed most progress in my department were not, by any means, proficient in music; some did not even sing at all. If you ask me, then, how they managed, I answer, by their wits, - by their native tact or acquired skill as teachers. I venture to say that there are from thirty to thirty-five of our teachers who are able to-day to give the musical instruction to their own classes in a very respectable manner. Indeed there will be found, in every building, from one to five who can do this."

The plan, then, briefly stated, is for the regular teacher, under the direction of the singing-master, to give instruction in music as in other branches. It is now too soon to speak of results; and I can only say that, so far as I am aware, the teachers are earnestly endeavoring to make the plan a success.

As there are doubtless some who still believe that none but those who are skilled in music can teach successfully, I desire to quote from the Boston School Report a paragraph relating to the instruction in music in the lower grades of the Grammar department:—

"According to the report of Mr. Holt. only seven out of the two hundred and fifty-one teachers who have come under his observation have proved themselves unable to do their work satisfactorily. 'Of these seven,' says Mr. Holt, 'three exchange work with other teachers at the time of the music-lesson; one employs a teacher from outside to aid her in this part of her work, who is present at the time of my visit to receive my instructions; while in three rooms the work is imperfectly done. I find that teachers who are regarded as superior in other branches obtain the best results in music. And many of my best teachers are among those who had no idea that they could do any thing in music when we commenced."

Such statements ought to give us courage as we enter upon a new system of instruction in this important branch of study. Believing as I do that the measure of success in this, as in other departments of the school-work, is largely dependent upon the tact, the perseverance, and the fidelity of the teacher, I certainly cannot doubt that the results hereafter will be highly satisfactory.

DRAWING.

The progress in Drawing during the year has been as satisfactory as could reasonably be expected. The full results of the system will not become evident until the pupils of the lowest grades shall have advanced by successive steps through the entire course, and shall thus have shown the degree of proficiency which can be attained by accomplishing the entire work prescribed by the regulations.

I submit, as a matter worthy of consideration, whether it is not now expedient to appoint a teacher whose duty shall be to take charge of the Drawing in the various schools of the city. If the right person can be secured to superintend the work in this department, no one can doubt that the results will be much more satisfactory than can be possible under the present system. I do not suggest that the regular teachers be relieved from the instruction of their classes; but I believe that, in order to give unity and efficiency to the teaching in this subject, a special instructor is not less needed than in the department of music.

We have complied with the requirements of the law passed

by the Legislature of 1870, making it the duty of every city and town having more than ten thousand inhabitants to give free instruction in industrial or mechanical drawing.

An evening school, organized in the month of November, to meet this requirement, has been, from the first, highly successful.

All the important facts relating to this school are before you in the Annual Report, and need not be repeated here.

Without attempting to discuss the wisdom of engrafting upon our school system this new feature prescribed by the law to which I have alluded, I can only say that it seems to me to be a step in the right direction. We can, even in Massachusetts, learn two things from the study of the common school systems of the more advanced nations of Europe: One is the necessity of a system of compulsory education, and the imminent danger to the State from any system which comes short of this; the other is the importance of technical or industrial schools.

These two features united have done so much to prepare Prussia for those marvellous achievements which have recently astonished the civilized world, that one of the greatest of English statesmen has declared that "the victory of Germany over France is the victory of the common school system of Prussia over the ignorance of the French Empire."

"There are in Prussia 361 schools devoted to architecture, mining, agriculture, forestry, navigation, commerce, and other technical studies, general and special. Besides schools for weaving and the textile manufactures, there are 265 industrial schools whose studies and hours are directly arranged for the use of mechanics. The provincial and municipal improvement schools, and those for foreman, workman, and apprentice, all are fitted with models, tools, and laboratories. There are also many drawing schools, in which the classes are arranged to suit various trades needing such instruction. In the weaving schools the pupils receive practical instruction, and also study chemistry as applied to the textile arts," &c.

But Prussia, far from being alone in the matter of industrial education, is even surpassed by some of the neighboring nations. Würtemberg, said to possess the best educated population in

Europe, having only 1,700,000 inhabitants, has 130 industrial schools of various kinds, in which there are more than 20,000 pupils.

England, too, is driven to the necessity of establishing a system of education somewhat similar to that of which I have spoken, in order to maintain her supremacy as a manufacturing and commercial nation. From 1860 to 1868 the number of industrial schools in Great Britain had increased from 9 to 300; while the number of pupils had advanced from 500 in the former year to 15,010 in the latter. I have thus presented these few facts, —gathered mainly from the Report of the Commissioner of Education,—not for the purpose of discussing the question of industrial education among us, but because they seemed to me to be of interest, and worthy of consideration.

TEXT-BOOKS FOR INDIGENT CHILDREN.

I intended to allude to the unsatisfactory manner in which textbooks are now furnished to so-called indigent children; but, for obvious reasons, I cannot now dwell upon it.

It seems to me very clear that we need a reform in this matter. A fair interpretation of the rule governing such cases seems to be that if the parent cannot or *does* not furnish the required books, and at the time when the child needs them, the sub-committees are bound to supply them at the expense of the city; and the assessors will add the price of such books to the next annual tax of the parent, or not, as they shall see fit.

The difficulty now is, that in prolonging the struggle between the sub-committees and teachers on the one side, and delinquent parents on the other, for the sake of reducing the books furnished by the city to the lowest possible number, much valuable time is lost. Frequently, weeks are consumed in the attempt to extort from parents that which should have been granted at the outset, if at all.

I trust that some plan may soon be adopted by which every pupil shall be promptly supplied with the required books, and that this may be done in such a manner that no tax-payer, as now, shall be compelled to pay for books furnished to the children of his more opulent neighbors.

I have thus given some of the conclusions which I have reached after a careful observation of the schools during the year. I well know how difficult it is thus to gather up the results of our labors, and I am fully aware how imperfectly the task has now been performed. I can, at least, feel sure that any errors of judgment into which I may have fallen, in estimating the progress of the schools, will be corrected by your own intimate acquaintance with the different subjects to which I have alluded.

Respectfully submitted.

E. B. HALE, Superintendent of Public Schools.



